DOCUMENT RESUME

ED 100 309 IR 001 395

AUTHOR	Meredith, J. C.
TITLE	Selective Dissemination of Microfiche Documents in a University Setting - Phase I. Project CLR-561.
INSTITUTION	Governors State Univ., Park Forest South, Ill. Univ. Library.
PUB DATE	19 Nov 74
NOTE	19p.; Financial and Substantive Report No. 2 (Period ending October 30, 1974)
EDRS PRICE	MF-$0.75 HC-$1.50 PLUS POSTAGE
DESCRIPTORS	College Faculty; Data Bases; *Information Dissemination; Information Needs; *Information Retrieval; Information Services; *Microfiche; Program Evaluation; Technology
IDENTIFIERS	*National Technical Information Service; SDI; Selective Dissemination of Information

ABSTRACT

Governors State University (Illinois) has developed and studied a system of selective dissemination of microfiche documents. Twenty-six faculty members in science and engineering were interviewed in depth to determine their information needs, interest categories, and descriptors to be used in searches. Individual profiles were constructed for each faculty member. These were sent to National Technical Information Service (NTIS), which then retrieved documents from its data base on a regular basis for the faculty. Some changes at NTIS, and the categorical structure used, made the service less relevant than it might have been and somewhat difficult to use. A table listing numbers of documents sent and charges is attached, as is a list of categories. (LS)

ED 100309

BEST COPY AVAILABLE

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

GOVERNORS STATE UNIVERSITY

PROJECT CLR-561
Financial and Substantive Report #2
(period ending October 30, 1974)

November 19, 1974

Selective Dissemination of Microfiche Documents in a University Setting - Phase I

This report conveys the financial statement stipulated in CLR letter CLR-561 of January, 1973, together with a summary of the project from September 30, 1973 to October 30, 1974. Also this report presents a rationale for modifying the Project Plan in accord with tentative conclusions.

Terminology

The National Technical Information Service has again changed the name of the dissemination service upon which this project is based, this time from "SCIM" (Selected Categories in Microfiche) to "SRIM" (Selected Research In Microfiche). As with the earlier change from "SDM" to "SCIM", no change in the service itself is involved. In this report, the new term "SRIM" will be used.

Chronology

Financial and Substantive Report No. 1 submitted. Project in suspended status.	November 30, 1973
Visit of principal investigator to NTIS.	December 12, 1973
Consultation with Dr. Don H. Coombs, Director of the School of Communication, University of Idaho, Moscow, Idaho	December 20-21, 1973
Governors State University relocated to permanent campus.	December 26, 1973 to April, 1974
CRT terminal and thermal printer delivered. Contract for on-line retrieval service signed.	June, 1974
CLR approves extension of project to April 30, 1975.	June 17, 1974
Renegotiation and testing of individual profiles.	July-August, 1974
Composite profile completed.	August 24, 1974
New categorical structure received from NTIS.	September, 1974
Revised composite profile transmitted to NTIS, requesting resumption of SRIM service.	October 28, 1974

IR 001 395

BEST COPY AVAILABLE

Developments Affecting the Project

NTIS

1. Categories used for SRIM service were converted, during 1973 and the first four months of 1974, from the original "GRTA" (Government Reports Topical Announcements) categories to new "WGA" (Weekly Government Announcements) categories. The latter are oriented toward an information-marketing philosophy rather than toward intellectual discipline. Although conversion lists were made available from time to time during the process, these did not adequately define the taxonomic shifts, and only one scope note has been provided (see Attachment (2).).

2. The cost of SRIM service has been increased to 45¢ per microfiche document. A further increase is expected.

3. NTIS has implemented a variant SRIM service based on descriptors, called "SRIM-Profile". Unlike "NTISearch", which uses the Lockheed DIALOG system to make demand retrievals, SRIM-Profile is implemented locally on a Census Bureau computer. Cost of the service is $100 per annum, plus $5 to $25 per profile modification, and the regular 45¢ charge per microfiche document shipped. The number of terms per profile is not limited, except that 99 is the largest single set that can be processed eliminating duplicates.

4. An 'enriched COSATI" topical structure is being developed, in which 86% of the categories will be the same as the original COSATI (as used in GRTA). Scope notes will be provided. Regular SRIM will supposedly be re-converted to the new structure.

Governors State University

1. Access to on-line retrieval services through Lockheed DIALOG and other systems has allowed us to refine our approach to SDI, e.g. to make direct comparisons between retrievals based on descriptors and retrievals based on subject categories.

2. Recruitment of competent student help has become extremely difficult. This in turn militates against copy-production in the kind of volume we accomplished during the first three months of the project.

Profile Revision

There are now 26 faculty members participating in the project. Six additional individuals who were interested in the service had to be omitted because their interests (education and humanities) could not be addressed with any precision in the present system, quite aside from the fact that the data base is not at all rich in those areas.

Each participant was interviewed in depth concerning his principal area of interest, working together with him in exploring the Thesaurus of Engineering and Scientific Terms. From the first sets of terms thus selected, rough specifications were derived, and each of these was tested on-line in the Lockheed DIALOG System. This permitted incorporation of variant terms not appearing in the Thesaurus, and of associated terms when these seemed desirable because of the sparsity of retrieval. In many cases, of course, it led to substitution of narrower terms, when an excessive

BEST COPY AVAILABLE

number of hits from comprehensive search presaged similar excess from bi-weekly updates. In many cases we reviewed results with participants, in order to confirm mutual understanding.

The next step was to try to identify subcategories in the WGA structure that would most likely include documents which one would expect to retrieve through descriptor search. This proved difficult partly because of lack of scope notes, but mainly because of the fact that the structure itself seems to be at odds with the way scientists and technicians think about things. Using a much larger set of specifications, one might substantiate a number of parametric changes, if this were indeed the way to achieve better consonance. However, parametric change cannot, in itself, solve the problem of excessive recall from a two-level taxonomy that purports to cover virtually all technical information. Businessmen and administrators may be comfortable with such a taxonomy, and, for general purposes, so may scientists and engineers. But for direct support of research and development at "work-bench" levels, by way of enhancing current awareness, its utility is questionable.

For project purposes, nevertheless, we formulated a composite profile for use with the SRIM system and have transmitted it to NTIS for immediate resumption of the service. Comparison of the new profile with the one originally used tends to show the effects of using the more elaborate technique just described:

	Original	Revised
Individual profiles	33	26
Subcategories available	323	286
Subcategories requested	133 (40.5%)	58 (20.3%)
Total requests	317	88
Average requests per participant	9.6	3.4
Range of requests per participant	1-27	1-5
Unique requests	66 (20.8%)	35 (39.7%)
Multiple requests	251 (79.2%)	53 (60.3%)
Maximum duplication of a subcategory	13[1]	5
Duplication level (unweighted)[2]	2.4	1.5
Duplication level (weighted)[2][3]	3.0	(to be determined)

Clearly duplication-level is critical in determining the effectiveness of the distribution system under study. If it is too small, one can say that direct service between NTIS and the client would be more effective. If it is too large, one or both of the following could be true:

The individual profiles are too generalized

The categorical structure is too generalized

---

[1]This increased to 20 when NTIS replaced many of the old subcategories with more general subcategories in group 91 and group 92. The effect was to make 80% of our clients recipient of all documents in the worst-case new subcategory (92E).

[2]Where 1.0 represents duplication for library purposes only.

[3]That is, taking into account the actual volume of duplication (see "Traffic").

BEST COPY AVAILABLE

If the latter is true in relation to a given population of users, it is true to some extent for every member of that population, and inevitably calls into question the use of that structure for serving the SDI needs of the given population.

Traffic

This heading is used to group all aspects of document receipt, copy-production, and distribution, which were covered in some detail in preceding reports. A record of traffic for each of the old subcategories has been compiled and will be included in the final report, together with a similar record of traffic under the new subcategories.

Service on the original profile was limited to AD and PB documents only, which in 1971 comprised 37% and 19%, respectively, of NTIS' output. Experience with Governors State University users has shown a much higher relative proportion of PB document traffic. For example there was an overwhelming bias toward the PB's in old category 53 (Area Planning and Development) which will undoubtedly be perpetuated in new category 91 (Urban Technology). We need to reduce the investment of staff time in copying and distributing the documents, because of the difficulty of obtaining adequate student help, so we are faced with the difficult choice of limiting input still further. Ideally, we should subscribe to those categories in the AD series that are less well represented in the PB series, and those in the PB series that are less well represented in the AD series. We may attempt this, time permitting, if we can obtain from NTIS a tabulation similar to that produced under the old categories, giving at least 6 months' figures under the new. In the meantime, we have chosen to subscribe to AD's only, because it appears that - aside from "Urban Technology", which is a dubious classification anyway - the AD's will serve project purposes the better of the two.

Evaluation

Aside from changes recommended by Dr. Coombs, the evaluation plan remains the same as originally proposed. Essentially we will be adding another dimension, that is, to observe the effect of briefly switching from SRIM to SRIM-Profile, under suitable control.

Proposed Project Plan Revision

Assumptions

Two of the assumptions on which the original proposal and plan were founded have proven defective:

> That the NTIS SDI service then known as "SDM" (Selective Dissemination of Microfiche) was sufficiently stable to provide a suitable base for testing a redistribution system.
>
> That the categorical structure used for SDM purposes would be precise enough to serve the SDI needs of the academic sector, at an acceptable level of relevance.

The first of these failed because of the massive realignment of categories and subcategories which NTIS carried out between May, 1973 and May, 1974.

BEST COPY AVAILABLE

Conversion lists did not mitigate the problem, because conversions were not on a 1:1 basis and because scope notes were never published. As a result, it was necessary to suspend the project for almost a year.

The second of these is more important, because it is fundamental to the kind of SDI with which we are most familiar, but which may now be considered obsolete for large multidisciplinary data bases.

A third assumption:

> That local (in-house) stimulus markedly increases the use of national SDI resources by members of the academic community

remains intact.

Characteristics of the Data Base

The NTIS data base of document résumés can be characterized as a very large, relatively undisciplined file. It is not comprehensive in any dimension. It is qualitatively uneven. Its taxonomy is suspect, so that the only reliable topical access is through terms imbedded in the résumés, rather than through the position of those résumés within a categorical structure. (The foregoing statements reflect conclusions set forth in the document referred to under "Miscellaneous".)

Hypothesis

It is hypothesized that plain SRIM based on the present gross categorical structure is not suited to the SDI needs of the academic community, because it lacks the precision needed to avoid unacceptable levels of irrelevance, for this particular file.

It is further hypothesized that SRIM-Profile, on the other hand, is suitable for the SDI needs of the academic community, because it responds to unique specifications rather than generalia, thus assuring better precision.

This leads to the question as to whether or not, if the second hypothesis be proven, one can devise a cost-effective system for redistribution of NTIS documents received in response to a composite profile. Obviously few if any individual profiles will be identical (in our case there were two). The composite profile will be long and complicated. Will there be enough redundancy to make it equal to very much less than the sum of its parts? How will the need for multiple copies be determined, and will the cost of the determination outweigh the advantage of in-house copying?

It is proposed that preliminary investigation along these lines be carried out concurrently with the research already under way, which is likely to prove the first hypothesis correct. By doing so we will be fulfilling an appropriate function of the pilot project, i.e., to discover new approaches to the basic concept, consistent with the following statement in the revised proposal of October 9, 1972:

> "On conclusion of the pilot project, we will establish appropriate objectives, tasks, guidelines, time-span, budgetary, and other conditions of a more comprehensive

BEST COPY AVAILABLE

study of microform document dissemination and use. We estimate that this study should be of at least two years' duration, should include use of a control group, should expand scope to include documents in the AEC, NASA, PB-T, JPRS, and TT series, and should examine:

1. Other microfiche distribution modes.

2. Stand-alone SDM (e.g., using in-house data processing of NTIS tapes).

3. Non-categorical SDM (such as recurrent NTISearch).

4. SDM in a CATV context."

Miscellaneous

Development of a Collegial Profile Subset

We explored the possibility of establishing a collegial profile subset as mentioned in our previous report. The attached memorandum (Attachment (3)) sets forth some of the considerations involved. Acquisition of a reader-printer by the College of Environmental and Applied Science has been deferred, so no further action has been taken.

Publication

The principal investigator has written an article entitled "NTIS Update; a Critical Analysis of Products and Services", appearing in the current issue of Government Publications Review. It does not deal with Project CLR-561 or tentative conclusions therefrom. Nevertheless the author appreciates the value of CLR's contribution in supporting his interest and extensive background studies dealing with NTIS.

Financial Report

Attached.

J. C. Meredith
Principal Investigator

BEST COPY AVAILABLE

NTIS SHIPMENTS RECEIVED

GRA Journal No.	Last #AD	Last #PB	No. of Documents	Charge	Packing List Date
	751-831	212-886	145		
73-01	875-424	213-087	551	209.38	1-28-73) sic
73-02	752-644	213-448	524	199.12	1-28-73)
73-03	853-165	213-674	397	150.86	2-21-73
73-04	828-540	213-983	401	152.38	3-04-73
73-05	866-814	214-208	349	132.62	3-19-73
73-06	755-155	214-514	421	159.98	3-30-73
73-07	755-965	215-078	612	232.56	4-17-73
73-08	757-013	216-642	551	209.38	5-03-73
73-09	757-719	218-052	479	182.02	5-14-73
73-10	758-505	218-997	531	201.78	5-25-73
73-11	758-988	219-059	58	22.04	6-06-73
73-12	759-813	220-208	585	222.30	6-25-73
73-11A	758-994	219-409	272	103.36	6-28-73
73-13	760-477	220-515	408	155.04	7-12-73
73-14	761-380	220-838	433	164.54	7-30-73
73-15	762-469	221-351	499	189.62	8-14-73
73-16	763-123	221-664	273	103.74	8-29-73
73-17	867-397	222-057	466	177.08	9-10-73
Total			7955	2967.80	

SCIM CATEGORIES

BEST COPY AVAILABLE

45. COMMUNICATIONS

A. Policies, regulations, and studies
B. Radio and television equipment
C. Common carrier and satellite
D. Sociopolitical
E. Graphics
F. Verbal
G. Communication and information theory
H. General

46. PHYSICS

A. Acoustics
B. Fluid mechanics
C. Optics and lasers
D. Solid state physics
E. Structural mechanics
F. Nuclear technology, standards, and safety

Ø Category includes Cryogenics, Plasma physics, Thermodynamics, Nuclear and theoretical physics, Particle physics, Quantum mechanics and relativity theory, Radiofrequency.

47. OCEAN TECHNOLOGY AND ENGINEERING

A. Marine engineering
B. Dynamic oceanography
C. Physical and chemical oceanography
D. Biological oceanography
E. Marine geophysics and geology
F. Oceanographic vessels, instruments, and platforms
G. Hydrography
H. Underwater construction and habitats

48. NATURAL RESOURCES

A. Mineral industries
B. Natural resource management
C. Natural resource surveys
D. Forestry
E. Soil sciences
F. Geology and geophysics
G. Hydrology and limnology

SCIM CATEGORIES (continued)

BEST COPY AVAILABLE

49. ELECTROTECHNOLOGY

A. Antennas
B. Circuits
C. Electromechanical devices
D. Electron tubes
E. Optoelectronic devices and systems
F. Power and signal transmission devices
G. Resistive, capacitive, and inductive components
H. Semiconductor devices

50. CIVIL AND STRUCTURAL ENGINEERING

A. Highway engineering
B. Civil engineering
C. Construction equipment, materials, and supplies
D. Soil and rock mechanics

51. AERONAUTICS AND AERODYNAMICS

A. Aerodynamics
B. Aeronautics
C. Aircraft (Exclusive of aircraft design for transportation)
D. Parachutes and decelerators

54. ASTRONOMY AND ASTROPHYSICS

A. Astrogeology
B. Astronomy and celestial mechanics
C. Astrophysics
D. Cosmic ray research

55. ATMOSPHERIC SCIENCES

A. Aeronomy
B. Dynamic meteorology
C. Meteorological data collection, analysis, and weather forecasting
D. Meteorological instruments and instrument platforms
E. Physical meteorology
F. Weather modification

57. MEDICINE AND BIOLOGY

A. Anatomy
B. Biochemistry

SCIM CATEGORIES (continued)

57. MEDICINE AND BIOLOGY (continued)

BEST COPY AVAILABLE

C. Botany
D. Clinical chemistry
E. Clinical medicine
F. Cytology, genetics, and molecular biology
G. Dentistry
H. Ecology
I. Electrophysiology
J. Immunology
K. Microbiology
L. Nutrition
M. Occupational therapy, physical therapy, and rehabilitation
N. Parasitology
O. Pathology
P. Pest control
Q. Pharmacology and pharmacological chemistry
R. Physiological psychology
S. Physiology
T. Psychiatry
U. Public health, hygiene, and industrial medicine
V. Radiobiology
W. Stress physiology
X. Surgery
Y. Toxicology
Z. Zoology

62. COMPUTERS, CONTROL AND INFORMATION THEORY

A. Computer hardware
B. Computer software
C. Control systems and control theory
D. Information processing standards
E. Information theory
F. Pattern recognition

63. DETECTION AND COUNTERMEASURES

A. Acoustic detection
B. Electromagnetic and acoustic countermeasures
C. Infrared and ultraviolet detection
D. Magnetic detection
E. Nuclear explosion detection
F. Optical detection
G. Personnel detection
H. Radiofrequency detection
I. Seismic detection

BEST COPY AVAILABLE

64. EARTH SCIENCES

A. Cartography
B. Snow, ice, and permafrost

68. ENVIRONMENTAL POLLUTION AND CONTROL

A. Air pollution and control
B. Noise pollution and control
C. Solid wastes pollution and control
D. Water pollution and control
E. Pesticides pollution and control
F. Radiation pollution and control
G. Environmental health and safety
H. Environmental impact statements — Strictly are no longer available.

70. ADMINISTRATION

A. Inventory control
B. Management practice
C. Management information systems
D. Personnel management, labor relations, and manpower studies
E. Research program administration and technology transfer
F. Public administration and government

71. MATERIALS SCIENCES

A. Ablative materials and ablation
B. Adhesives and sealants
C. Carbon and graphite
D. Ceramics, refractories, and glass
E. Coatings, colorants, and finishes
F. Composite materials
G. Corrision and corrosion inhibition
H. Elastomers
I. Fibers and textiles
J. Iron and iron alloys
K. Lubricants and hydraulic fluids
L. Materials degradation and fouling
M. Miscellaneous materials
N. Nonferrous metals and alloys
O. Plastics
P. Refractory metals and alloys
Q. Solvents, cleaners, and abrasives
R. Wood and paper products

BEST COPY AVAILABLE

72. MATHEMATICAL SCIENCES

- A. Algebra and number theory
- B. Analysis (Mathematics)
- C. Geometry
- D. Mathematical logic
- E. Operations research
- F. Statistical analysis

73. NON-DESTRUCTIVE TESTING

- A. Ultrasonic testing
- B. Radiographic testing
- C. Hydrostatic testing
- D. Miscellaneous testing

74. MILITARY SCIENCES

- A. Antiaircraft defense systems
- B. Antimissile defense systems
- C. Antisubmarine warfare
- D. Chemical, biological, and radiological warfare
- E. Logistics, military facilities, and supplies
- F. Military intelligence
- G. Military operations, strategy, and tactics
- H. Nuclear warfare
- I. Passive defense systems

75. MISSILE TECHNOLOGY

- A. Air and space-launched missiles
- B. Missile guidance and control systems
- C. Missile launching and support
- D. Missile tracking systems
- E. Missile trajectories and reentry dynamics
- F. Missile warheads and fuzes
- G. Surface-launched missiles
- H. Underwater-launched missiles

76. NAVIGATION, GUIDANCE AND CONTROL

- A. Control devices and equipment
- B. Guidance systems
- C. Navigation and guidance system components
- D. Navigation systems

SCIM CATEGORIES (continued)

BEST COPY AVAILABLE

77. NUCLEAR SCIENCE AND TECHNOLOGY

A. Fusion devices (Thermonuclear)
B. Isotopes
C. Nuclear auxiliary power systems
D. Nuclear explosions and devices
E. Nuclear instrumentation
F. Radiation shielding, protection, and safety
G. Radioactive wastes and radioactivity
H. Reactor engineering and nuclear power plants
I. Reactor fuels and fuel processing
J. Reactor materials
K. Reactor physics

79. ORDNANCE

A. Ammunition, explosives, and pyrotechnics
B. Armor
C. Bombs
D. Combat vehicles
E. Detonations, explosive effects, and ballistics
F. Fire control and bombing systems
G. Guns
H. Rockets
I. Underwater ordnance

81. PROPULSION AND FUELS

A. Combustion and ignition
B. Electric propulsion
C. Fuel and propellant tanks
D. Jet and gas turbine engines
E. Liquid propellant rocket engines
F. Liquid rocket propellants
G. Miscellaneous rocket engines and motors
H. Miscellaneous rocket propellants
I. Nuclear propulsion
J. Reciprocating and rotating combustion engines
K. Solid propellant rocket motors
L. Solid rocket propellants

82. PHOTOGRAPHY AND RECORDING DEVICES

A. Holography
B. Photographic techniques and equipment
C. Recording devices

BEST COPY AVAILABLE

84. SPACE TECHNOLOGY

A. Astronautics
B. Extraterrestrial exploration
C. Manned spacecraft
D. Spacecraft trajectories and flight mechanics
E. Space launch vehicles and support equipment
F. Space safety
G. Unmanned spacecraft

85. TRANSPORTATION

A. Air transportation
B. Surface transportation
C. Subsurface transportation
D. Transportation safety
E. Pipeline transportation
F. Global navigation systems

88. LIBRARY AND INFORMATION SCIENCES

A. Operations and planning
B. Information systems
C. Marketing and user services
D. Personnel
E. Reference materials

89. BUILDING TECHNOLOGY

A. Architectural design and program analysis
B. Environmental design
C. Construction
D. Structural analyses
E. Building standards
F. Building technology management
G. Construction materials and equipment

90. GOVERNMENT INVENTIONS FOR LICENSING

A. Mechanical devices and equipment
B. Chemistry
C. Nuclear technology
D. Biology and medicine
E. Metallurgy
F. Electrotechnology
G. Instruments

SCIM CATEGORIES (continued)

BEST COPY AVAILABLE

91. URBAN TECHNOLOGY

- A. Environmental management and planning
- B. Transportation and traffic planning
- C. Public services
- D. Communications
- E. Housing planning and construction
- F. Health services
- G. Urban administration and planning
- H. Urban-regional relationships
- I. Emergency services
- J. Economic planning

92. BEHAVIOR AND SOCIETY

- A. Job training and career development
- B. Organizational psychology
- C. Social concerns
- D. Education, law, and humanities
- E. International relations

94. INDUSTRIAL AND MECHANICAL ENGINEERING

- A. Production planning and process controls
- B. Quality control and reliability
- C. Plant design and maintenance
- D. Job environment
- E. Environmental engineering
- F. Tooling, machinery, and tools
- G. Manufacturing processes
- H. Safety engineering

95. BIOMEDICAL TECHNOLOGY AND ENGINEERING

- A. Prosthetics and mechanical organs
- B. Tissue preservation and storage
- C. Biomedical instrumentation and bioengineering
- D. Human factors engineering
- E. Life support systems
- F. Bionics and artificial intelligence
- G. Health care facilities and services

SCIM CATEGORIES (continued)

BEST COPY AVAILABLE

96. BUSINESS AND ECONOMICS

A. Business and economic conditions
B. Domestic commerce and marketing
C. International commerce and marketing
D. Consumer affairs
E. Minority enterprises
F. Banking and finance
G. Area development

97. ENERGY

A. Energy sources
B. Energy use, supply, and demand
C. Power and heat generation
D. Energy conversion and storage
E. Energy transmission
F. Fuel conversion processes
G. Policies, regulations, and studies
H. Engines and fuels

98. AGRICULTURE AND FOOD

A. Agricultural chemistry
B. Agricultural economics
C. Agricultural equipment, facilities, and operations
D. Agronomy, horticulture, and plant pathology
E. Animal husbandry and vetrinary medicine
F. Fisheries and aquaculture
G. Agricultural resource surveys
H. Food technology

99. CHEMISTRY

A. Analytical chemistry
B. Industrial chemistry and chemical process engineering
C. Polymer chemistry
D. Basic and synthetic chemistry
E. Photo and radiation chemistry
F. Physical and theoretical chemistry

BEST COPY AVAILABLE

MEMORANDUM

November 16, 1973

To: D. Casagrande
H. Sievering

From: J. Meredith

Subject: Disposition of microfiche distributed to EAS faculty through the SDM Project

1. Pursuant to the general agreement reached at last week's EAS faculty meeting, the procedure discussed herein is suggested as a means of

a. alleviating production problems of the Project,

b. minimizing overlap (and excessive duplication and waste) by centralizing materials of interest to several faculty members, and

c. providing a central file consisting of an appropriate subset of NTIS documents.

2. According to information just received from NTIS, some of the problems of scope and definition, which I referred to in the meeting, may be resolved in the near future. I expect to visit Washington next month to get a better idea of just how the revised system will work.

3. I think we should establish individual profiles that would reflect individual specialties only, supplemented with a general profile that would capture any documents of general EAS interest which would otherwise escape. Distribution of the former would be direct, as heretofore, but with the proviso that as soon as the recipient had scanned the titles he would forward all those not desired for immediate use or permanent retention, to the EAS Secretariat.

4. A recent unpublished report of a survey conducted at NASA Ames confirms what many of us have believed, namely that scientists (generally) like microfiche for scanning and storage purposes, but insist on hard-copy (original or blowback) when a document is to be used as a working paper, or for other intensive use. This means that a reader-printer is a necessary adjunct to a central file such as we have been discussing, and it is recommended that EAS provide for same in its equipment budget.

BEST COPY AVAILABLE

5. A simpler approach to a central file of microfiche documents in EAS would be to make a single distribution to that file, covering the EAS composite profile. This would have two advantages:

a. It would obviate the need for more than one copy of any document within the profile.

b. It would ensure that all documents within the composite profile would actually reach the file, instead of being detained, or retained indefinitely, by an individual.

However it has two serious disadvantages:

c. It places the individual, for whom the selective dissemination service is primarily intended, one more remove from source. (Obviously he is once removed already because of our redistribution system.)

d. We have no reliable means of notifying the individual that such-and-such document within his profile has been received, without investing a great deal of additional clerical effort. Even then, he doesn't have the document in hand; if it is of interest, he has to go to the file and fish it out.

6. I think we must separately address the need for bibliographic control of the file. For the present, the only tools are the Government Reports Announcements (GRA) and the Government Reports Indexes (GRI). (A duplicate set of these should be maintained in EAS.) They permit retrieval of any document by subject, author, title, or category - <u>if</u> the document happens to be held. Since EAS would hold only a fraction of the total AD and PB series, a more useful tool might be a machine-generated list of actual holdings, something I hope LRC will eventually have, covering its entire NTIS collection. Ideally, this should be coupled with an on-line retrieval system, either remote (as with Lockheed/Tymenet) or in-house. I will prepare a memorandum for Dean Andrews regarding this kind of facility.

7. To summarize current recommended action and procedure, it is suggested that:

a. EAS establish a central file of NTIS microfiche documents, served by a reader printer.

BEST COPY AVAILABLE

b. SDM Project distributions be effected as follows:

(1) To individuals according to narrowly defined interests, so that multiple copies are ≤ 3.

(2) To the EAS central file according to broad EAS interests.

c. Individual faculty members forward documents of no immediate personal use to the central file. (The Project will furnish the materials in a special envelope to facilitate this.)

d. Explore possibility of generating machine listings of holdings (LRC).

e. Explore possibility of on-line retrieval (LRC/EAS).

JCM/rb

Copy to: Dean Andrews